

**LOCAL/STATE MAINTAINED ROADWAYS**

Currently the City maintains 12.6 miles of roadways. Maintenance of all street signs, painted curbing and roadway is conducted by the Public Works Department. Harrington has several State-maintained roadways located within the City limits; therefore, the City works closely with the Department of Transportation on development entrance and exit locations, traffic studies and roadway improvements. The State roadways are:

Delaware Avenue  
Dorman Street  
Clark Street  
Commerce Street  
Little Mastens Corner  
Vernon Road

Liberty Street  
DuPont Highway (US 13)  
Milford Harrington Highway (RT 14)  
West Street  
Park Brown Road

As part of the entrance approval process with the Department of Transportation, all new development projects must obtain approvals on any State-maintained roadways. Improvements are being made as developments are approved and constructed.

At this time, no major improvements are being proposed by the Department of Transportation on Route 14. The City should consider providing input for all DelDOT traffic studies when reviewing future developments within this area. While Route 14 is not identified within the Corridor Capacity Preservation Program, the volume of traffic raises concern for future development. This highway serves the traffic traveling east of Harrington toward Milford and the southern beach communities.

In March 2012, the Dover/Kent MPO conducted a field inventory of each street (city and state maintained) in the City to assess the existing condition of the pavement. The assessment was completed by an engineering technician who qualitatively rated the pavement condition as good, fair, or poor. Based on the field assessment, the MPO developed the following list of roadways that will require pavement resurfacing and/or rehabilitation in the near future:

- Dickerson Street
- Mechanic Street
- Hanley Street
- Mispillion Street
- East Milby Street
- Brown Street
- Simmons Street
- Harrington Avenue
- Dixon Street
- Liberty Street (Dorman Street to U.S. 13)
- Commerce Street (Reese Avenue to Mispillion Street)



City staff identified these additional streets that will require pavement resurfacing and/or rehabilitation in the near future:

- Peck Street
- Calvin Street
- Railroad Street
- Wolcott Street
- Coleman Street

In the spring of 2012, the City rehabilitated Mispillion Street and East Milby Street between Commerce Street and Hanley Street.

The City Council agreed to have DelDOT clarify the ownership of the cross-over streets located between the southbound and northbound side of US 13/DuPont Highway. The ownership and maintenance of these are unknown and have caused confusion with projects and jurisdiction regulations. The City believes DelDOT should own and maintain all the cross-over streets located on US13 for consistency of application of guidelines to development projects. It is understood the City's existing public water and wastewater utilities will not be required to comply with DelDOT specifications. If DelDOT owns and maintains these cross-over streets, every development project would know the approving jurisdiction in advance of design and construction. This project has not been completed and it is recommended the City continue to strive for ownership clarification soon.

## **US 13 CORRIDOR CAPACITY PRESERVATION PROGRAM**

U.S. Route 13, known as DuPont Highway, is a major highway for Kent County and the entire State. Exhibits 23 and 24 depict the roadway segment in Harrington. U.S. Route 13 splits into two one-way roads in Harrington with businesses and a few residences in the median and serves as the main service commercial area.

The Corridor Capacity Preservation Program (CCPP) was established in accordance with 17 Del. Code § 145. The Program's primary goal is to manage and preserve the traffic capacity along the corridors of U.S. Route 13, U.S. Route 113, SR1 and SR48. The primary goal is accomplished by:

- Creating service roads
- Permitting safe access for low traffic generating developments
- Permitting access to secondary roads for larger traffic generating developments
- Prioritizing capital transportation projects (i.e. interchanges, service roads) identified in the completed corridor plan.
- Designing and constructing capital transportation projects as needed.

The information in this section comes from the Corridor Capacity Preservation Program manual; it can be found at [http://deldot.gov/information/pubs\\_forms/manuals/corr\\_cap/index.shtml](http://deldot.gov/information/pubs_forms/manuals/corr_cap/index.shtml)

**Land use/CCPP approaches for Level 1 & 2 Investment Areas are as follows:**

### **Direct Access**

For proposed developments, direct access to the corridor may be permitted if reasonable alternative access (either to an existing secondary road or through an adjacent property) is not available.

- Direct Access May Be Permitted If: Alternative access is determined to be reasonable but degrades the operation or safety of an adjacent intersection (as determined by a traffic engineering study).
- Direct Access May Be Temporary If: The Department constructs an improvement project along the corridor, such as a local access road, the property's direct access may be removed, and access would be provided via the access road.

### **Alternative Access**

If a property has reasonable alternative access to a secondary road, no direct access to the corridor will be permitted. In determining reasonableness, the Department will evaluate the impact of the alternative access on the functionality and the legal use of the property.

### **Access Control**

- Entrance Consolidation - Reduces the density of access onto a main roadway and creates greater spacing between access points.
- Service Roads - Allows for visibility along the corridor and spreads out access to existing local roads and ramps.
- Cross Access Easements - A tool used to plan for future entrance consolidations. For new developments or a change in use that requires an entrance permit, a perpetual cross-access easement may be required as part of site plan approval. The easement will provide the opportunity to allow connections to adjacent properties and/or provide for the construction of a future access road or other improvements. Agriculture, landscaping, signs, and parking may be allowed as a temporary use within the easements and right of way reserved along the corridor. Any future removal or relocation of an item placed within the easements and right of way reservation will be the responsibility of the property owner. No structures may be built within these areas.
- County/Municipal Set-Asides - Sufficient area must be set aside within the balance of the parcel to satisfy county or municipal requirements (parking, landscaping, signing, sidewalks, etc.) once an access road or other improvement is constructed within the reserved easement or right of way.

### **Access Improvements**

The Department will concentrate its investment in Level 1 and 2 Investment Areas by planning, designing, and constructing transportation improvement projects that maintain the capacity of the corridor. To maintain the free flow of traffic, in addition to building new roads or maintaining bridges and other infrastructure as necessary, projects may involve fairly large improvements such as elevating a roadway to eliminate cross-traffic from a busy, often accident-prone intersection.

**Local Roads:** If we are going to force development onto local roads, we have to improve them. Examples of improvements include acceleration lanes to allow merging into traffic, and reducing points of access from several to one access point.

**Intersections:** Improvements to intersections allow for a higher volume of traffic. Improvements include adding capacity to the intersection to collect traffic and accommodate turns to keep non-turning traffic from using the turn lane as a passing lane.

**Interchanges:** Interchanges are used on major roads to eliminate intersections and limit access by elevating sections of the roadway and adding ramps to access major and minor roadways. Often they replace former at-grade intersections controlled by traffic signals. Traffic merges into and exits off the roadway via a series of controlled ramps.

DeIDOT's improvement plans for the Harrington area included:

- Closure of the median opening at US 13 at Carpenter Bridge Road,
- Construction of a cul-de-sac at the intersection of US 13 and Carpenter Bridge Road,
- Improvements to signal timing and turning radius for southbound vehicles on US 13,
- Improvements to turning radius for northbound vehicles on US 13,
- Intersection improvements at Harrington Fairgrounds,
- Addition of shoulders based on Truck Study recommendations.

## DeIDOT & City of Harrington Coordination

The City has developed a relationship with several State agencies including DeIDOT, in relation to planning and development within and around the City limits. Several joint planning meetings have been held with all parties involved on redevelopment and new projects.

During one of these meetings, the City was successful in requesting a pedestrian crossing from Clark Street to the median of DuPont Highway (Royal Farms parcel). The pedestrian crossing should be encouraged for future developments to continue the link to the Midway Shopping Plaza. This would be the only identified pedestrian crossing on DuPont Highway. All designs are completed using the DeIDOT standards and specifications.

## PUBLIC TRANSPORTATION

### Bus Routes

The DART bus service currently runs Monday-Friday for the Harrington-Dover Route 117. As you can see from the route map below, Harrington currently has three bus stops located within the community: Clarks Corner, Delaware Avenue at Clark Street, and US 13 at Delaware State



Fair Grounds. Current buses operate leaving Harrington to Dover from 5:35 am until 5:17 pm. Routes leave from Dover and arrive in Harrington from 8:05 am until 6:14pm. Route 117 stops can easily connect with other bus services to New Castle and Sussex County locations. The US Census indicates that the majority of Harrington residents commute using private vehicles rather than alternative transportation.

## **RAILROAD FACILITIES**

Delaware's State Rail Plan (SRP) provides a basis for federal and state rail investment within Delaware. The 2011 SRP sets forth Delaware's freight and passenger rail transportation policy, including commuter rail. The SRP is developed to reflect the interests of rail stakeholders and strives to meet the following requirements:

- Broaden the understanding of rail issues for all stakeholders
- Define the role of railroads in a multimodal environment
- Identify infrastructure and other improvements required to improve rail service
- Provide a framework to implement rail improvement initiatives in Delaware
- Support the Delaware Department of Transportation (DelDOT) and other agencies in obtaining federal/other funding

The information in this section of the Harrington Comprehensive Plan comes from the 2011 SRP, it can be found at: [http://dartfirststate.com/pdfs/DelDOT\\_SRP\\_101011.pdf](http://dartfirststate.com/pdfs/DelDOT_SRP_101011.pdf) The SRP describes how rail fits into the overall transportation planning process and presents a series of goals, objectives, and strategies for Delaware's rail system. The SRP serves as a strategic guide for DelDOT, stakeholders, and the public to guide the future freight and passenger rail capital investments.

Delaware's freight rail system is of vital importance to the State. As a "green" mode of transportation, freight traveling by rail reduces highway congestion, improves safety, and uses less energy per ton-mile than other modes of transportation. The rail corridors throughout the State are economic drivers for communities large and small, and they provide the opportunity for Delaware's industries and farmers to extend the markets for their goods. Historically, rail carloads in 1989 had 103,069 carloads originating or terminating in the State (excluding through movements). While this number has substantially decreased in recent years due to the nationwide recession, prior to this time the numbers remained around 100,000 carloads per year. As the auto industry has contracted in Delaware in recent years, coal and chemicals have grown in auto's place to keep the number of carloads relatively stable.

Norfolk Southern is the largest rail freight carrier in Delaware. It serves the State through access rights over the Northeast Corridor granted by the federal government. It also serves the Delmarva Peninsula with a line extending south to Pocomoke, Maryland. Norfolk Southern typically operates between 9 and 12 trains per day in Delaware, with some of the unit trains, e.g. grain and stone, coming in three or four days each week.

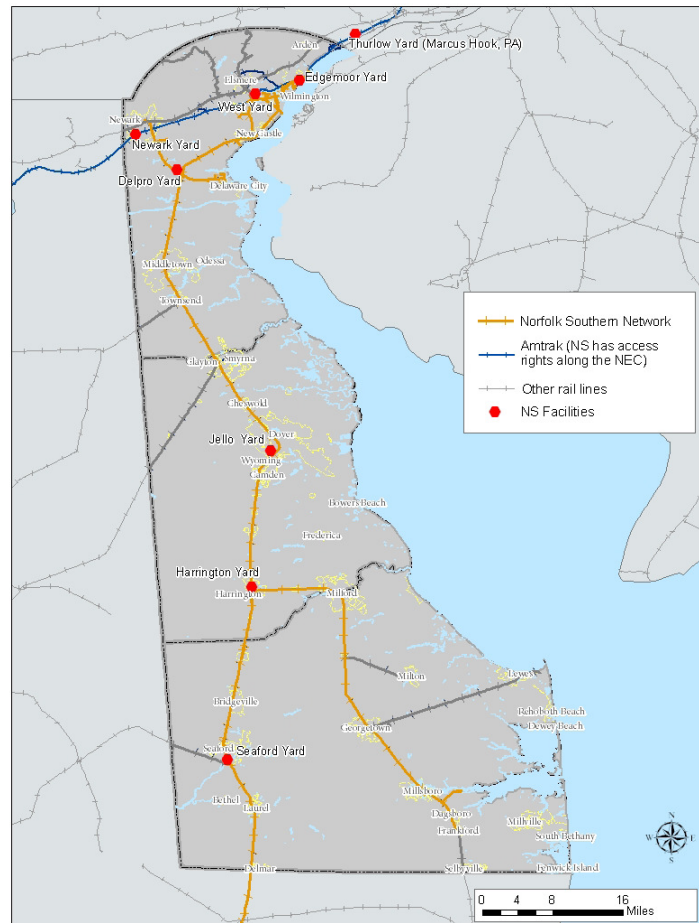
The major commodities in Delaware carried by Norfolk Southern include grain, corn oil, soybean oil, coal, autos, steel, crushed limestone, chemicals, plastics, paper, wood products, lumber, pulpwood, propane, petroleum products and other miscellaneous products.

Norfolk Southern operates approximately 158 route miles in Delaware. The Norfolk Southern network additionally includes 23 miles of trackage rights on the Northeast Corridor (NEC).

Norfolk Southern's network in Delaware includes four major classification yards.

Edgemoor Yard (Wilmington)  
Newark Yard (Newark)  
Harrington Yard (Harrington)  
Jello Yard (Dover)

Harrington Yard is located south of the City, adjacent to the State Fairgrounds. There are general merchandise through-trains that operate between Enola Yard in Harrisburg, Pennsylvania and the Harrington Rail Yard in Kent County. Newark and Harrington are principal local train bases with four locals typically on a weekday.



Harrington Yard is adjacent to land designated for industrial use. Harrington would like to explore options with the Office of State Planning and Delaware Economic Development Office for use of this land that would be consistent with the Delaware State Rail Plan. Harrington would be very interested in pursuing rail-related industries to support economic development. Because of Harrington's proximity to agricultural areas, industries related to agriculture should be pursued and would be consistent with the types of commodities Norfolk Southern currently transports.

## PEDESTRIAN PLAN

In February 2012, in conjunction with the City's update of its Comprehensive Plan, the City Manager and City Planning Consultant for Harrington met with staff from the Dover/Kent County Metropolitan Planning Organization (MPO) to discuss the city's need for a comprehensive review of the following components of their transportation system:

- Sidewalks
- Curbing

- Pavement condition

The MPO is the federally-designated agency that oversees federal transportation funding and prioritization throughout the Kent County region. The MPO works cooperatively with the Delaware Department of Transportation (DelDOT), Kent County Levy Court, and all of the local municipalities in the County to identify local transportation needs, conduct planning studies, and develop prioritized project listings based on funding availability.

The MPO, as part of its annual Work Program, has professional transportation planning and engineering staff available to assist municipalities evaluate and address their local transportation needs. The MPO, working cooperatively with the City Planner and City Manager, initiated a planning study that would assist the City in ultimately developing a prioritized list of the need for improvements to the existing sidewalks, curbing, and pavement in Harrington. The City indicated that it would like to establish an annual capital improvement program dedicated to funding sidewalk, curbing, and pavement improvements based on a logical, quantifiable process.

## **Sidewalks**

In February 2012, the MPO conducted field inventories of every City and State-maintained street in Harrington to map the location of existing sidewalks throughout the City. In addition, the condition of existing sidewalks was noted and areas in need of improvements were highlighted.

Initially, the MPO developed a criterion for prioritizing proposed sidewalk locations in the City (attached). The prioritization criterion was based on a pedestrian improvement plan recently developed by the Wilmington Area Planning Council (WILMAPCO). The initial criterion was based primarily on the proximity of a proposed sidewalk location to the following community attributes:

- Bus stop
- Commercial property
- Community center
- Library
- Recreational facility
- Schools
- Senior or disabled community
- Existing sidewalks

In addition, the criterion factored in a proposed sidewalk's impacts to private property and utilities. An initial prioritized list was developed by the MPO and presented to the City. It was agreed that the list would only evaluate City-maintained streets, as DelDOT would assume responsibility for improving and/or installing sidewalks along State-maintained roads such as U.S. Route 13 or Delaware Avenue. In addition, when a property develops or re-develops, DelDOT can require the developers to install sidewalks as part of the land development approval process.

The initial priority list included 4 categories of prioritization, essentially ranking each street from 1 through 4 based on the criterion noted above. The existing sidewalk locations were also mapped, based on the field inventory. Following this mapping review, it became apparent that



there were streets in the City lacked a sidewalk on either side of the street. The City agreed that the first priority should be to ensure that all streets in Harrington have sidewalk on at least one side of the street. Based on this assessment, there are about 7 streets without any sidewalk or significant gaps in sidewalk, as noted below and shown as the Priority 1 locations on Figure 21.

- Thomas Street (add on west side)
- Gordon Street (add on south side)
- Center Street (add on south side)
- Smith Street (add on south side)
- Benjamin Street (add on west side)
- Railroad Avenue (add on west side)
- Liberty Street (state-maintained)



The MPO and City also evaluated streets where sidewalks are of relatively low priority, due to the following factors:

- low residential density
- lack of pedestrian attractors and generators
- distance from existing sidewalks or the town center
- right-of-way or environmental constraints
- potential for a private developer to construct sidewalks as part of a future development

These low-priority areas (Priority 4) are also shown on Figure 21. Priority 2 and Priority 3 locations, which were developed based on the prioritization criterion established early in the study, are shown on Figure 21, and would be prioritized following the completion of the projects identified as Priority 1.

In August 2010, DeIDOT completed a study of the pedestrian needs in the area adjacent to Lake Forest South Elementary School and Chipman Middle School, both of which are located along Dorman Street in the northwest part of the City. This study, completed as part of the Safe Routes to School program, recommended a variety of pedestrian-related improvements in the vicinity of these schools. Design plans for these improvements have been prepared by DeIDOT, so the MPO did not recommend any additional sidewalk and/or pedestrian improvements in this area.

### Curbs

The MPO completed a similar analysis of the existing curbs in Harrington. Again, areas where curbing is missing were identified through a field inventory of all streets within City limits. The



initial priority locations, identified as streets currently with no curbing, are shown on Figure 22. In 2011, the City's engineering consultant had completed a detailed assessment of missing curb locations throughout the City. As a result, the MPO did not conduct any additional analysis related to the prioritization of missing or substandard curb locations. The City's primary focus is to provide curbing in locations where curbing does not currently exist. As shown on Figure 22, there are numerous areas throughout the City where there is currently no curbing. These locations will have to be evaluated in more detail to ensure that they are feasible from a drainage perspective, to evaluate proper outfall areas, and to ensure that they are cost-effective. In addition, the City will be reviewing these locations to determine if there are opportunities to combine curbing projects into future pavement rehabilitation contracts.

## **PLANNED TRANSPORTATION IMPROVEMENTS/STUDIES**

### **Traffic Impact Studies**

Traffic Impact Studies have been completed by the developers for several projects located in the City. To obtain the study results, it is recommended contact be made with DelDOT. The City of Harrington is often called to a Traffic Impact Study scoping meeting to assist in proposed project locations as well as identify study intersections.

The Department of Transportation includes the City of Harrington on all correspondence in regard to the developments located within the City. This intergovernmental relationship has grown and it is anticipated to continue with good communication.

### **Safe Routes to School**

The Delaware Department of Transportation selected Lake Forest South Elementary School and Chipman Middle School in Harrington to receive planning assistance through the Delaware Safe Routes to School Program. With oversight and input from a team of staff and volunteers, the schools received technical assistance from transportation consultants in the development of the SRTS Plan. The SRTS plan can help the Harrington SRTS Team identify projects and programs to improve the safety of children walking and bicycling to school, and encourage more families to do so.

The Harrington Safe Routes to School (SRTS) Team was developed and met during the spring of 2010. A community meeting was also held to present the initial drafts of recommendations and to solicit community input. An assessment of the existing conditions was completed upon discussion of existing student travel patterns, conditions of existing infrastructure, and behavioral of safety concerns related to walking and bicycling to school. Upon completion of the assessment, recommendations using strategies from each of the Five Es: Engineering, Education, Encouragement, Evaluation and Enforcement.

After six months of meetings and coordination, the action plan was completed and some of the identified improvements have been funded. This is an ongoing collaborative effort with several Lake Forest School representatives, City representatives and DelDOT coordinator with the technical assistance team. Federal SRTS program was established by transportation legislation in 2005 and funding has decreased thru this program since the initial establishment of funds. DelDOT selected this project to receive assistance thru the DE SRTS Program. The plan included two categories with identified items below and are further shown on Exhibit 25:

1-Projects considered for near term construction & funding by DeIDOT SRTS (9 total)

- School Zone-entry signage & pavement markings
- Park Brown Road-pedestrian connection to school from Clarks Corner
- Intersection of West/Center Streets-signage, ADA compliant curb ramps, improve pedestrian crossing facilities/controls
- Center Street parking lot entrance-establish traffic flow & signage
- Center Street sidewalk, north side-ADA compliant curb ramps & missing pedestrian linkage
- Chipman Middle driveway-ADA compliant curb ramp & install sidewalk across from service road driveway
- Intersection of Dorman/Center Streets-ADA compliant curb ramps, restripe high visible crosswalks, remove improper signage, expand concrete area on northwest corner to create space for students waiting to cross.
- Dorman Street between Center/North-realign crosswalks, ADA complaint curb ramps, stripe high visible crosswalk, add signage, adjust speed limit.
- Center Street between Dorman/Delaware-refresh school zone signs & pavement markings, work with property owners to enforce vegetation limits.

2-Projects considered for future construction & funding (3 total)

- Center Street between Dorman/Delaware-repair damaged sidewalks, ADA compliant curb ramps, improve pedestrian crossing at railroad tracks.
- School Site-install canopy over existing bicycle racks at both schools.

Dorman Street, north of North Street-Coordinate public easements for future developments for pedestrian connectivity internally as well as on all road frontages. Potential walking bridges connecting schools to developments.

Funding was awarded for the following projects thru this National program:

2011	\$712.00 Non-infrastructure (SRTS supplies May 2011 Walk to School Program)
2011	\$250,000 Infrastructure (Park Brown Road crossing improvements; Center Street sidewalk, curb ramps, & crossings; School zone signage & pavement markings)
2012	\$647.00 for Bike Locks

**GOALS**

Goals listed are not in any specific order and should be considered as funding and/or resources are available.

- Continue ongoing coordination and communication with DeIDOT
- Update the City of Harrington Street Priority list based on completed work and assessment information from the Dover/Kent MPO
- Continue to use the priority street list during the annual budget process for capital improvement allocations
- Work with Dover/Kent MPO and DeIDOT on a traffic study with recommended improvements (pedestrian, bicycle, etc.) for RT 14-Milford Harrington Highway and service road options along US 13 DuPont Highway

- The City should ensure the crossover streets located on DuPont Highway receive final clarification for maintenance and jurisdiction
- Increase education and additional services as they arrive for DART bus service within the community
- Coordinate bus shelter location and design with DART representative on new development
- Meet with the railroad representatives on a biannual basis regarding the current and future demands for service and how it impacts the community
- Work with the State Office of Planning and Delaware Economic Development Office to exploit the proximity of industrial land to Harrington Yard and pursue rail-related industries that support economic development
- Maintain the sidewalk and curbing priority list based on completed work and assessment information from the Dover/Kent MPO
- Use the sidewalk and curbing priority list during the annual budget process for capital improvement allocation
- Continue to support the Safe Routes to School Team at Lake Forest School District and DelDOT coordinator to ensure areas of concern for safety of the children are addressed
- The City should also work with any agencies regarding a regional or statewide bicycle plan
- Review and update standard specifications regarding roadways, sidewalks, curbing, etc. for future development
- Strongly support and encourage commuter rail service with a stop in Harrington that is centrally located in the State
- Master planning consideration for all transportation areas such as: pedestrian, bicycle, rail, vehicle and bus services.